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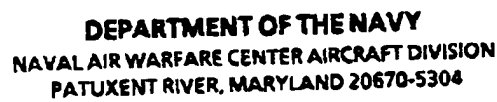
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Enclosure (6)

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Subj: REQUEST FOR RELEASE OF TECHNICAL INFORMATION

Encl: (1) Flight Test Update - F/A-18E/F Super Hornet (Slides) (2 copies)
~~(2) F-18E1 Arrival at NAWCAD Patuxent River (Video Tape)~~

1. Enclosures (1) and (2) are forwarded for review and approval for public release.
2. Enclosures (1) and (2) will be presented at the Society of Experimental Test Pilots, San Diego, California on 15 March 1996. The authors of enclosure (1) are LCDR T. C. Gurney and Mr. Jim Sandberg. The proposed NAVAIR reviewer is Mr. Willie Smith (PMA265-F1). Request approval by ASAP or no later than 13 March 1996.
3. Please contact Dorothy Reppel at DSN 342-1709 or commercial (301) 342-1709 should you have any questions.

Karen L. Brown
KAREN L. BROWN

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2. 100% 100% 100%

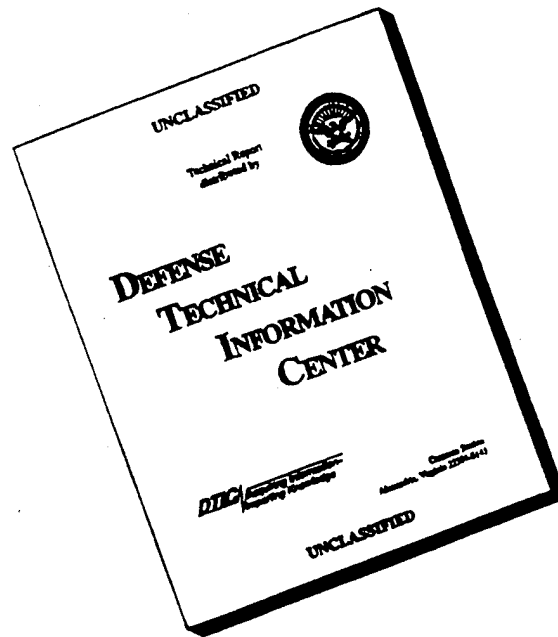
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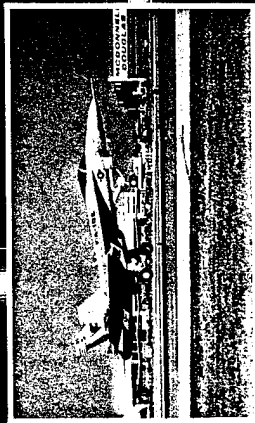
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Flight Test Update

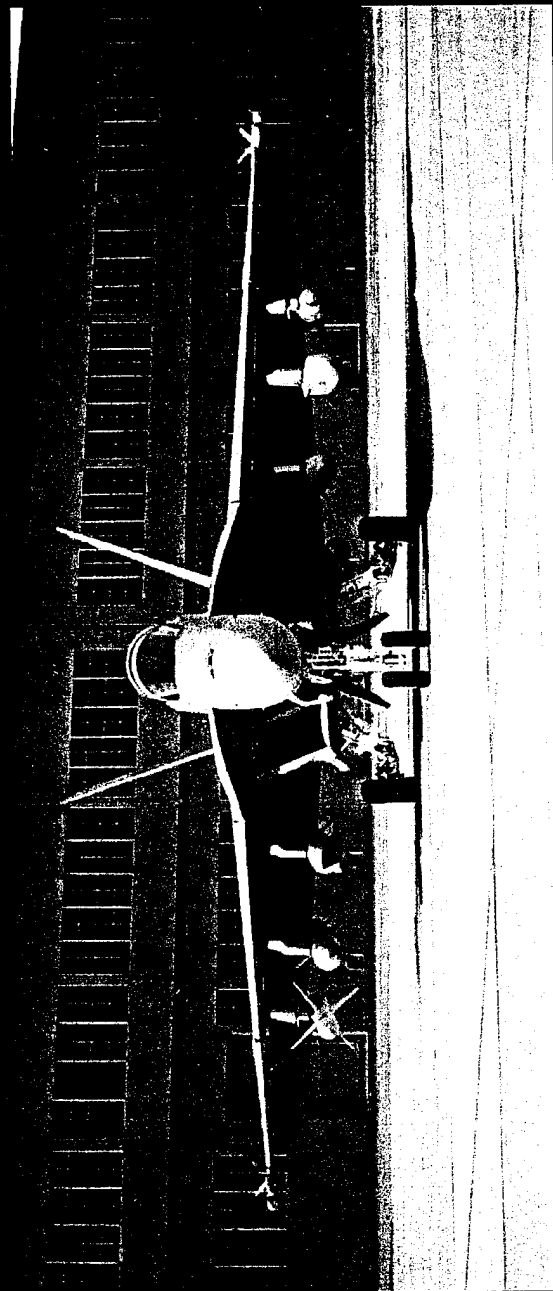


F/A-18E/F
Super
Hornet



The Society of Experimental Test Pilots

26th San Diego Symposium March, 1996



**Mr. Jim Sandberg, NGC (AF)
LCDR Tom Gurney, USN (M)**

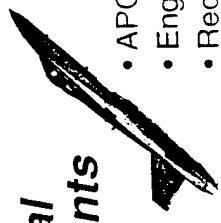


- Program History
- Aircraft Description
- Flight Test Program
- Lessons Noted



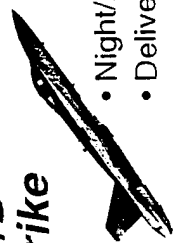
Continues Hornet Evolution

Additional Improvements



- APG-73 Radar Upgrade
- Engine Upgrade
- Reconnaissance

F/A-18C/D Night Strike



- Night/Adverse Weather Capability
- Deliveries Began October 1989

F/A-18C/D

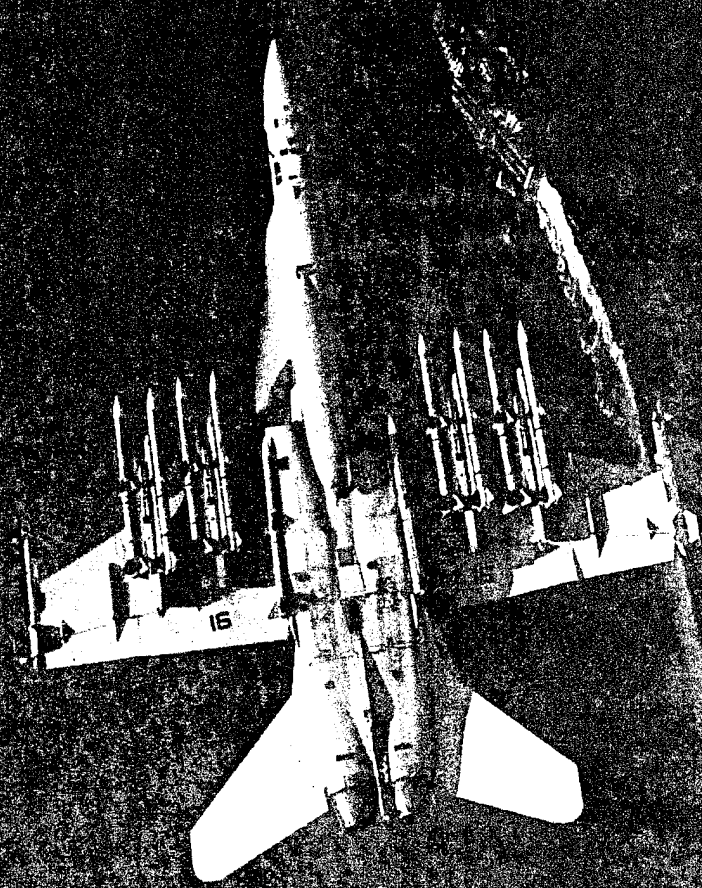


- Advanced Weapons
- Improved Systems
- Fleet Deliveries September 1987

F/A-18A/B



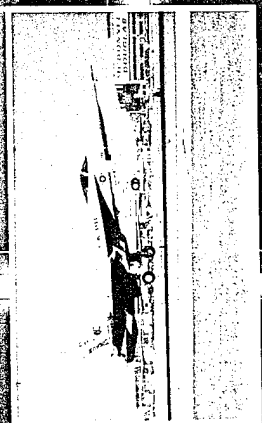
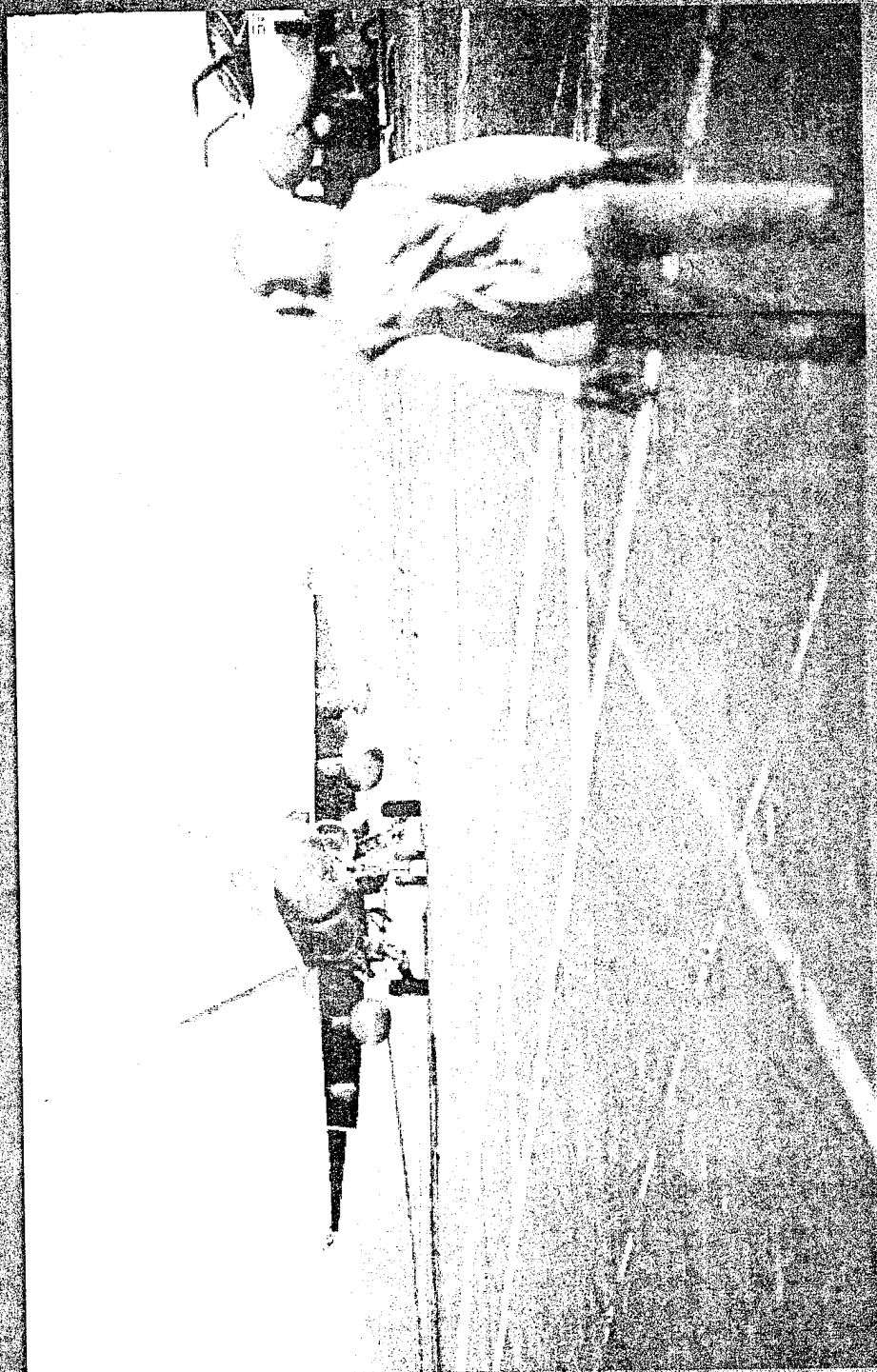
- Replaced A-7 and F-4
- First Flight November 1978



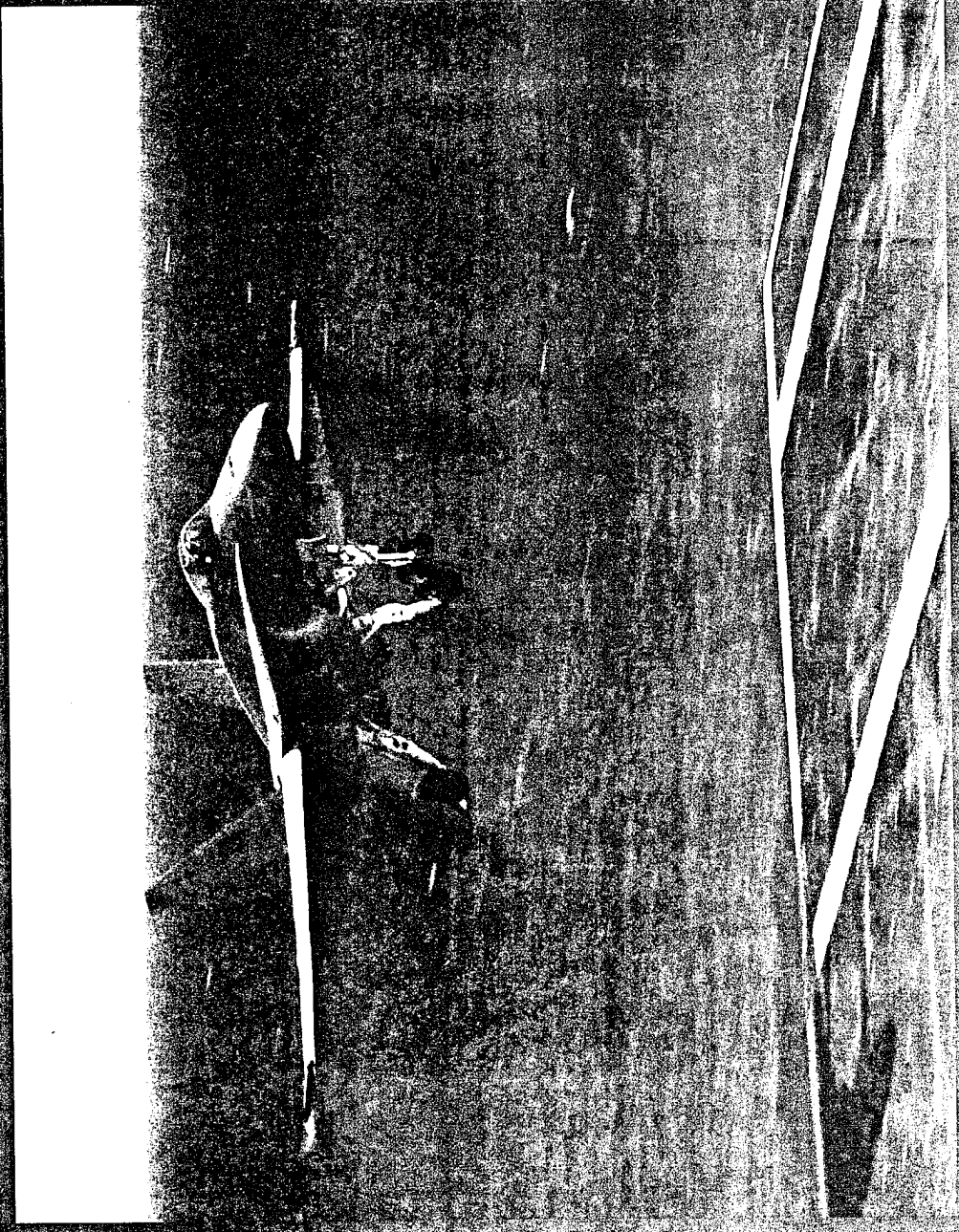
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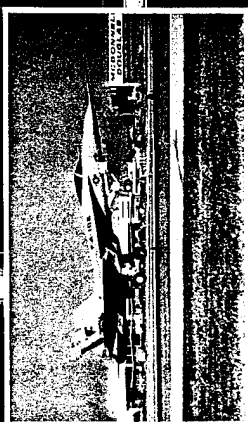
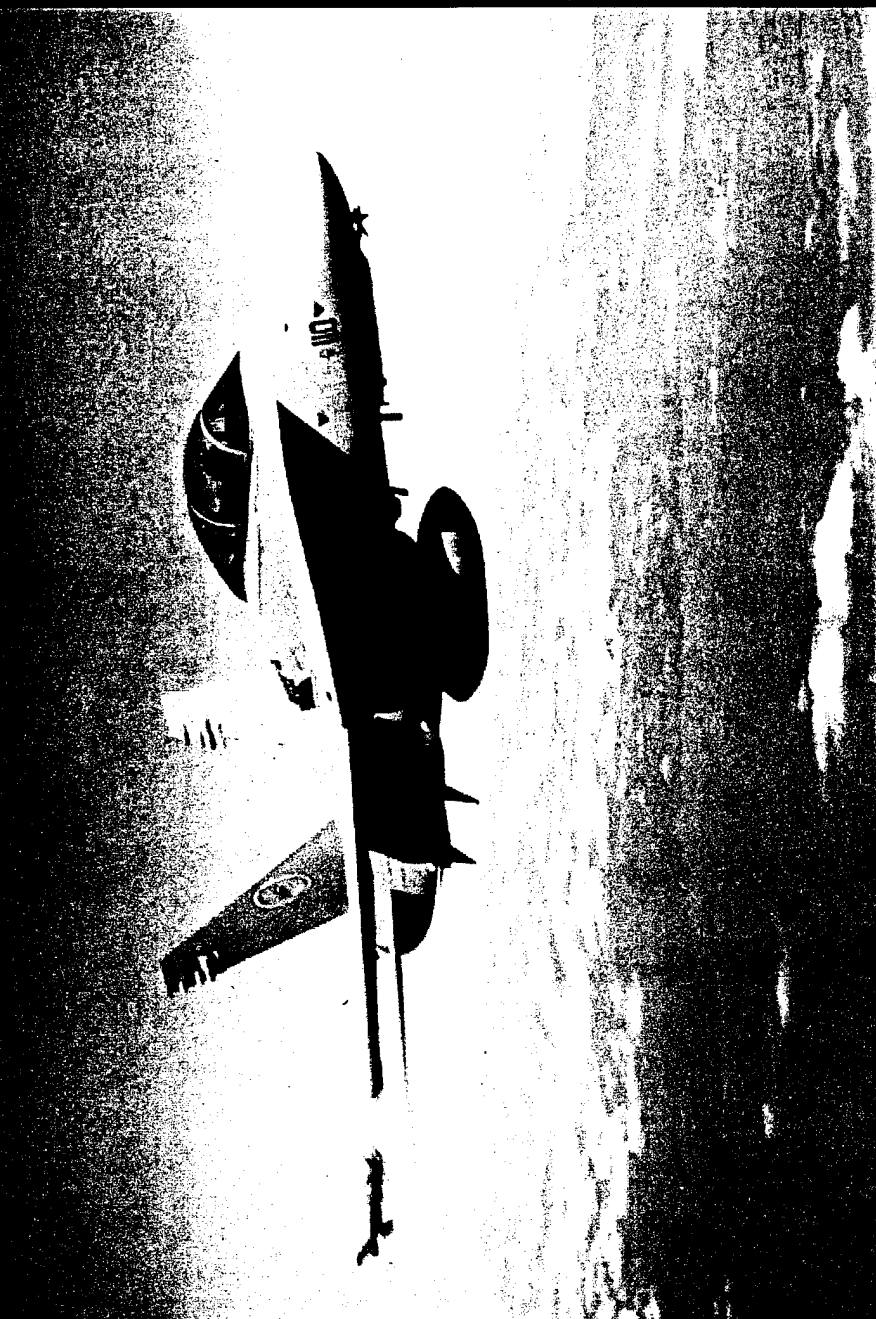


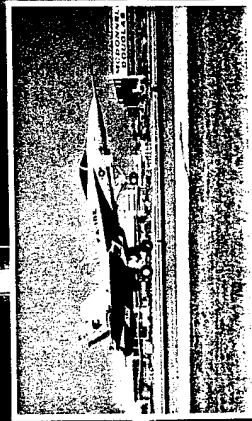


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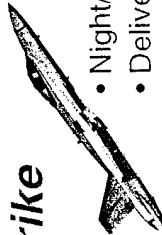
Continues Hornet Evolution

Additional Improvements



- APG-73 Radar Upgrade
- Engine Upgrade
- Reconnaissance

F/A-18C/D Night Strike



- Night/Adverse Weather Capability
- Deliveries Began October 1989

F/A-18C/D



- Advanced Weapons
- Improved Systems
- Fleet Deliveries September 1987

F/A-18A/B



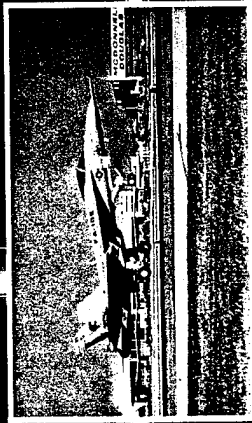
- Replaced A-7 and F-4
- First Flight November 1978

F/A-18E/F



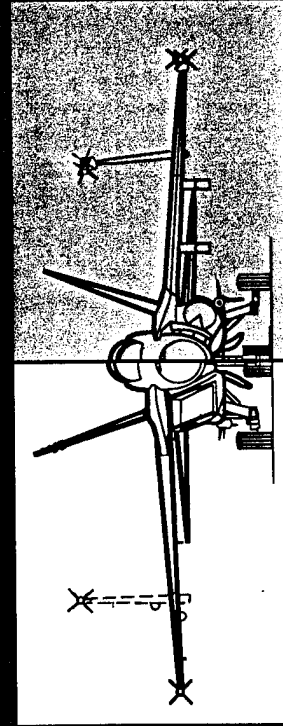
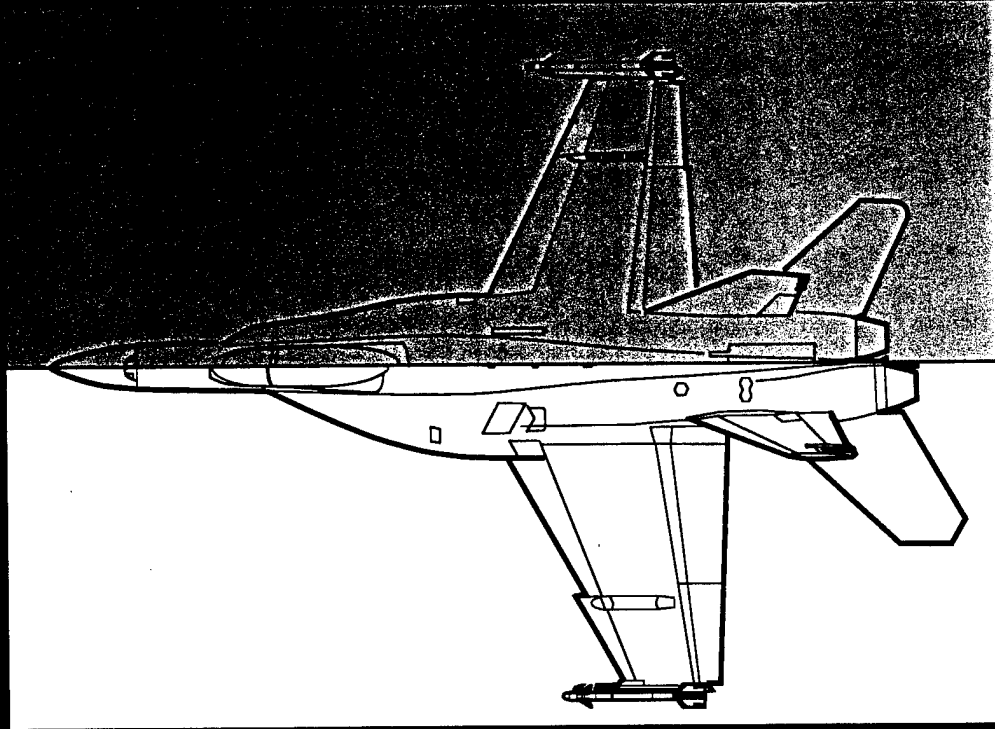
- Longer Range
- Payload Flexibility
- Increased Payload Recovery
- Improved Survivability
- Growth Margin

Maintaining Outstanding Carrier Suitability and Growth Potential

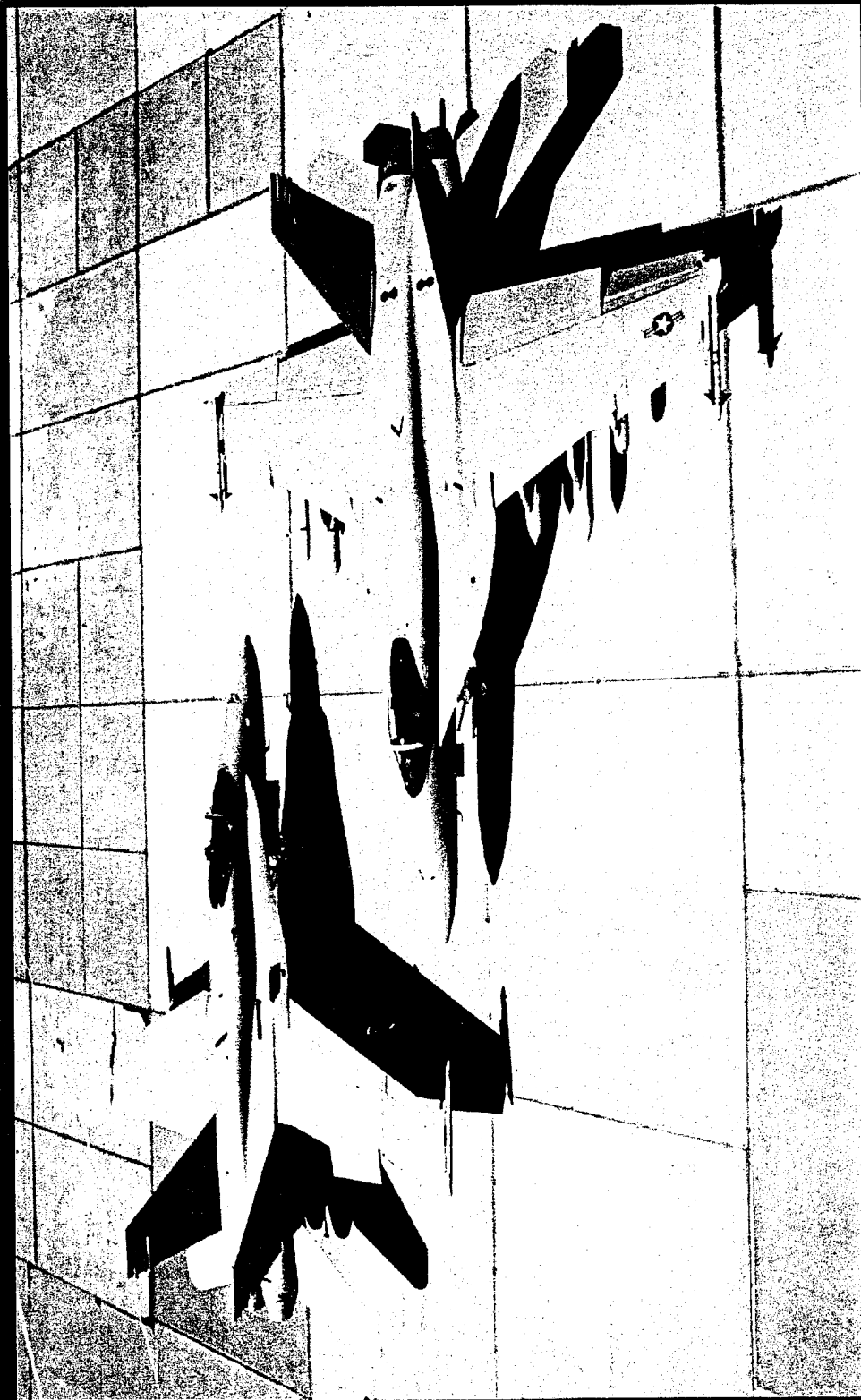
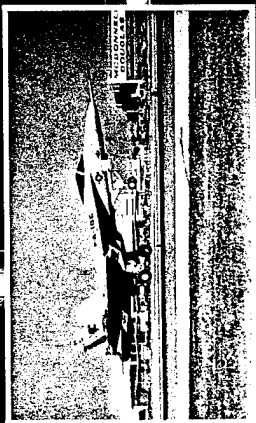


F/A-18E Characteristics

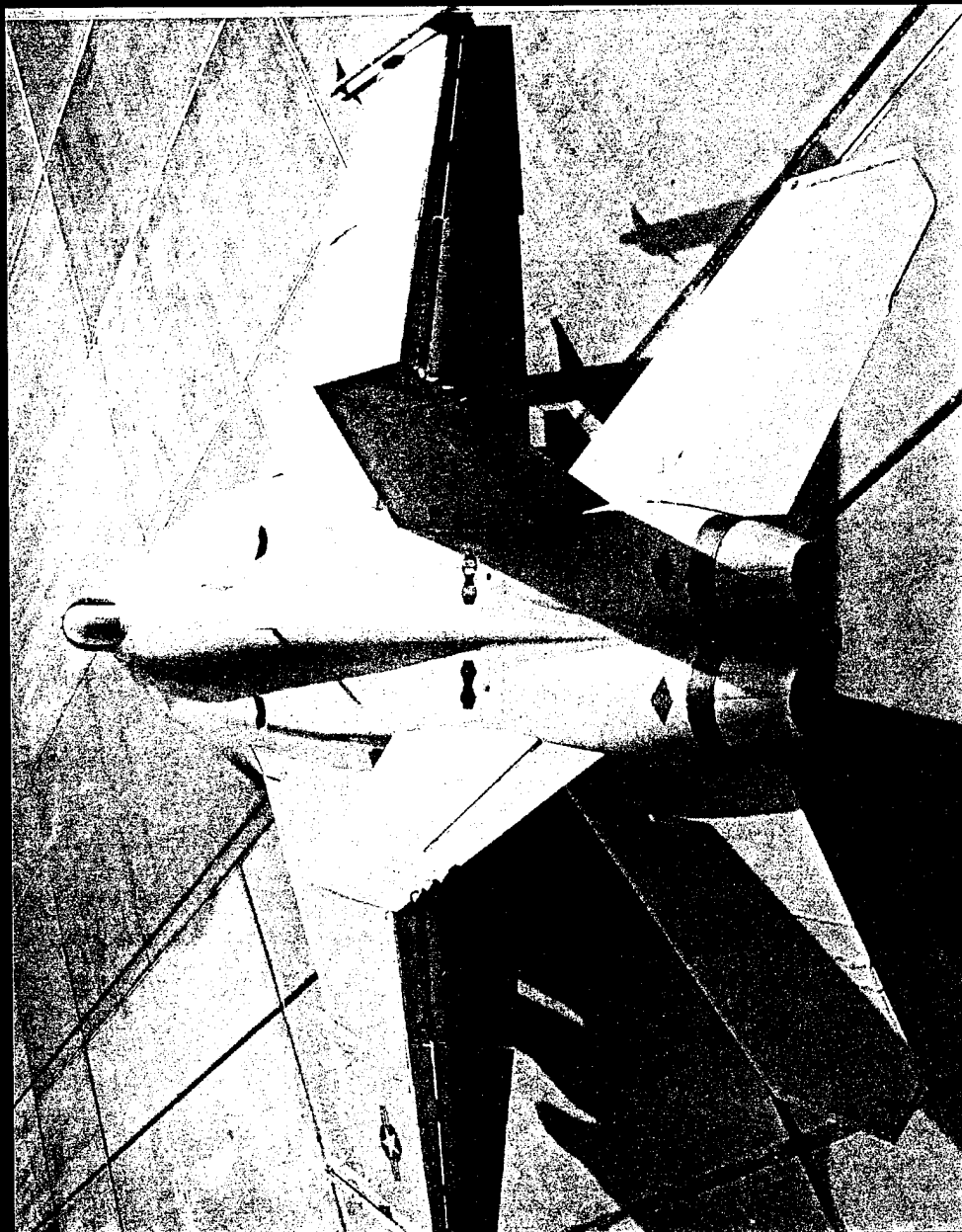
	F/A-18E	F/A-18C
Wing Area	500 sq ft	400 sq ft
Weight		
Empty	30,564 lb	23,332 lb
Max TOGW	66,000 lb	51,900 lb
Takeoff (Fighter Escort)	47,874 lb	37,790 lb
Carrier Landing	42,900 lb	33,000 lb
Propulsion		
(2) F404 Derivative Turbos	F414	F404
Engine	44,000 lb	32,000 lb
Total Thrust Class (SLSU)		
Fuel (JP-5)		
Internal	14,460 lb	10,860 lb
External		
330 gal. Tanks	6,730 lb	6,730 lb
480 gal. Tanks	9,790 lb	
Design Load Factor (USN)	7.5 g	7.5 g



C - E Comparison



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F/A-18E/F Features

Additional 3,600(E)/3,385(F) lb Internal Fuel

Dual Pressure Hydraulics

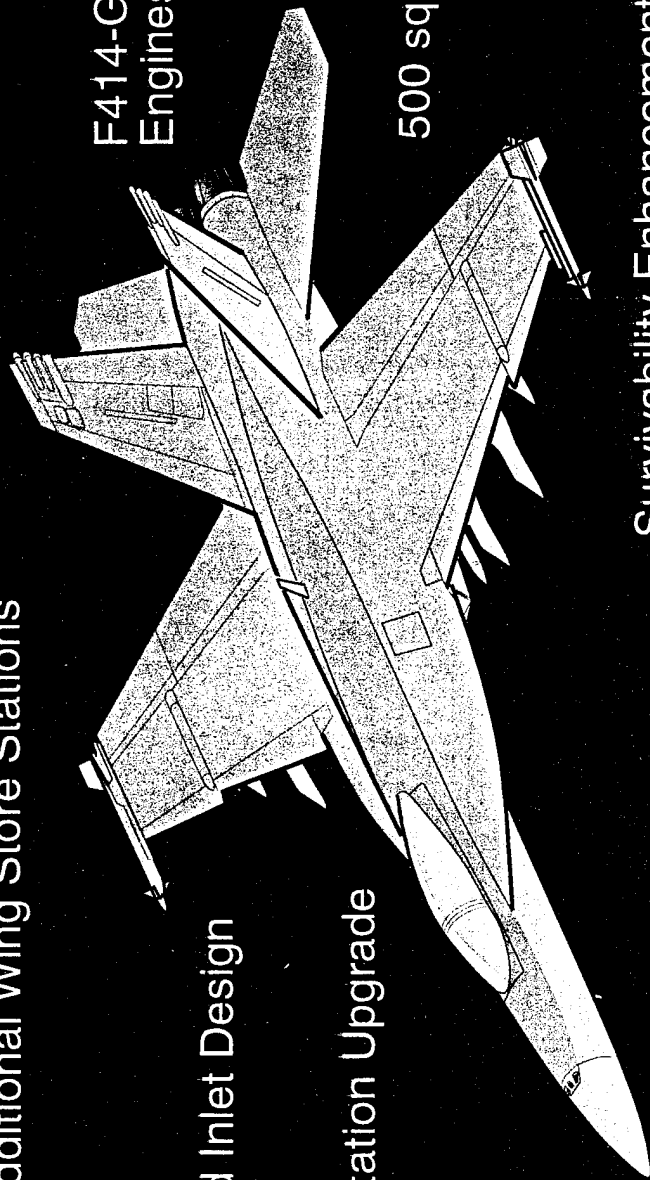
Two Additional Wing Store Stations

F414-GE-400
Engines

Improved Inlet Design

Crew Station Upgrade

500 sq ft Wing



Survivability Enhancements

Aerial Refueling Store Compatibility

Increased Composite Usage for Fuselage Skins

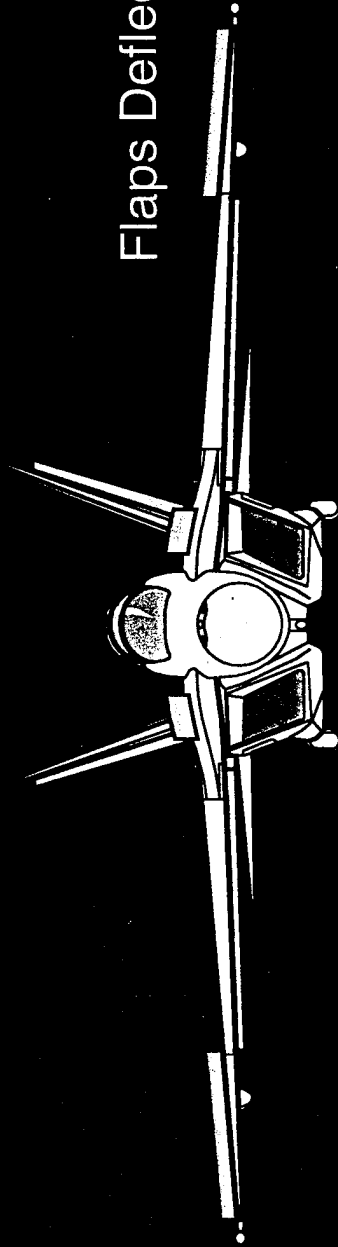
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Alternate Speedbrake Mechanization

Primary Flight Controls Deflect

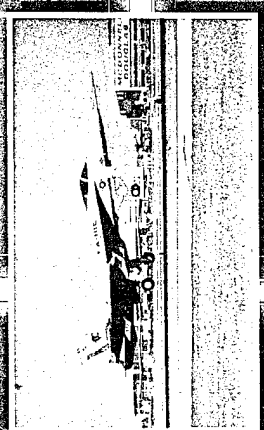
LEX Spoilers Deflect



Flaps Deflect

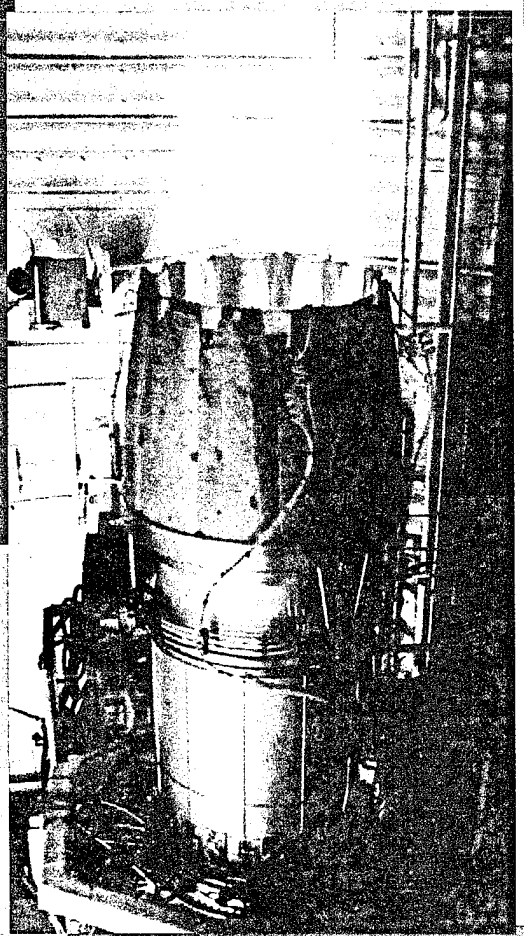
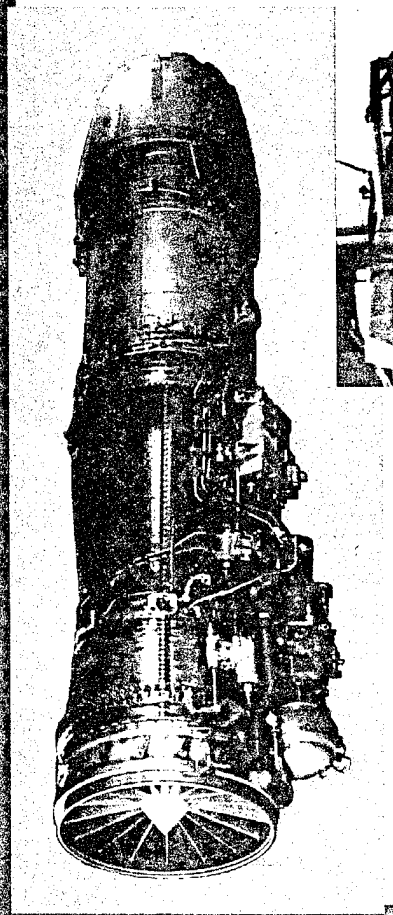
Mechanization Provides Roll and Yaw Command Priority Logic

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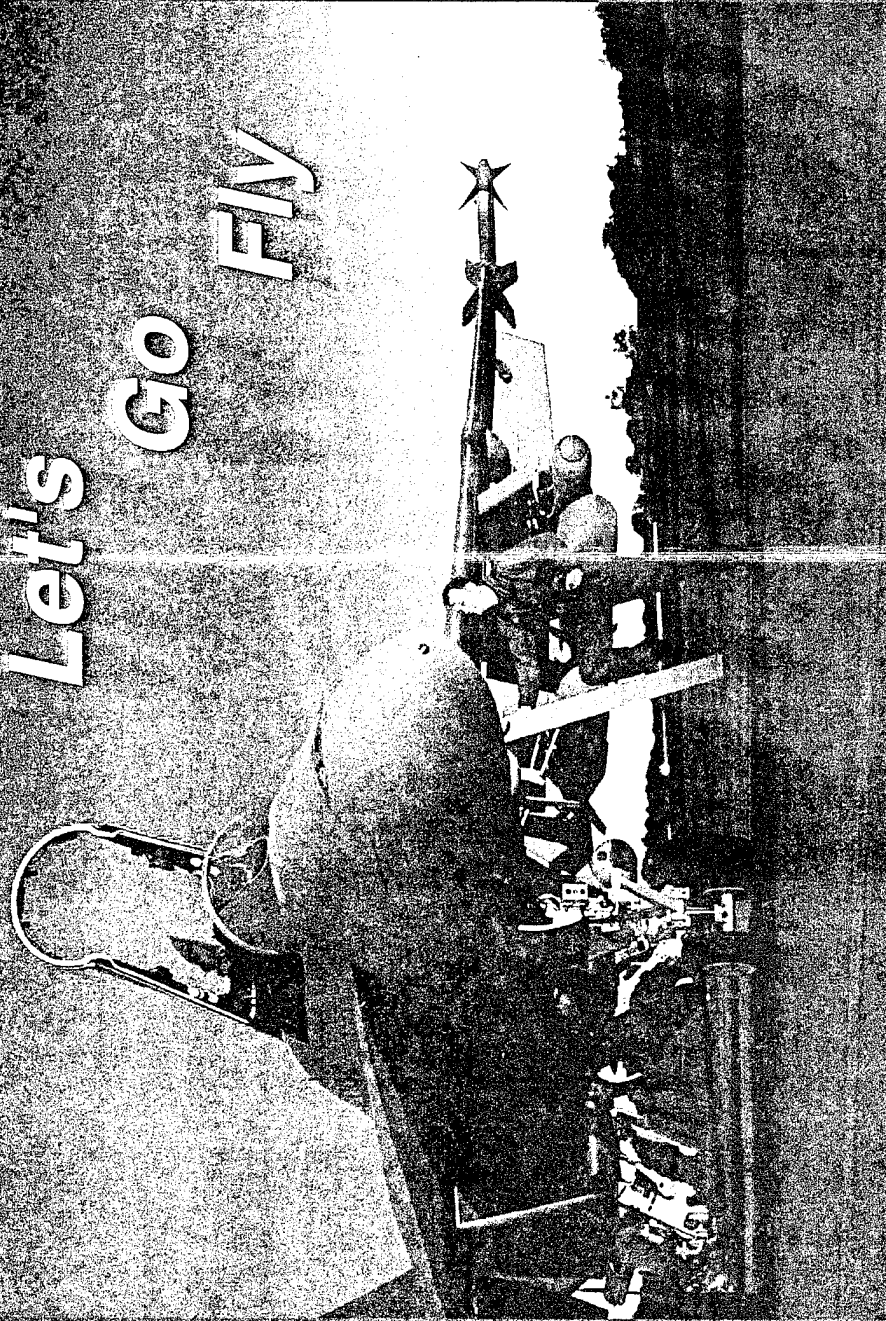


F414-GE-400 Turbofan Engine

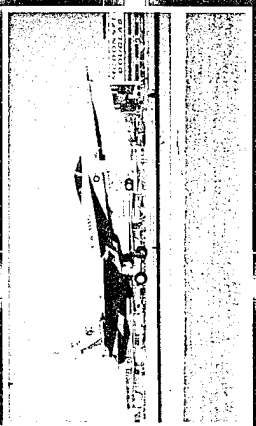


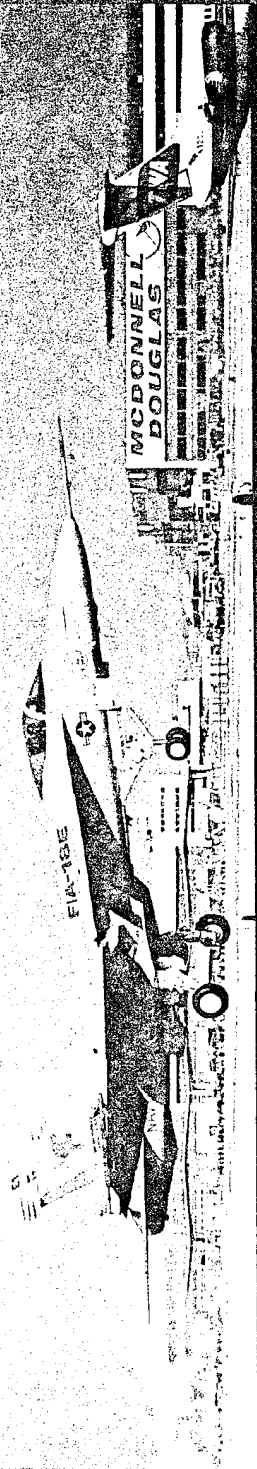
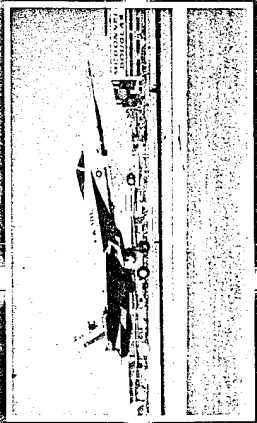
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Let's Go FLY

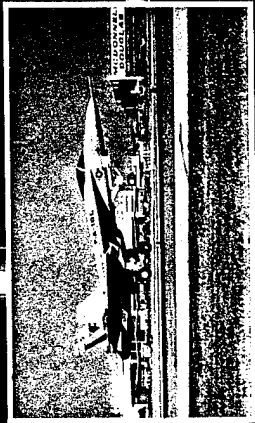


Cessna 441 Conquest II





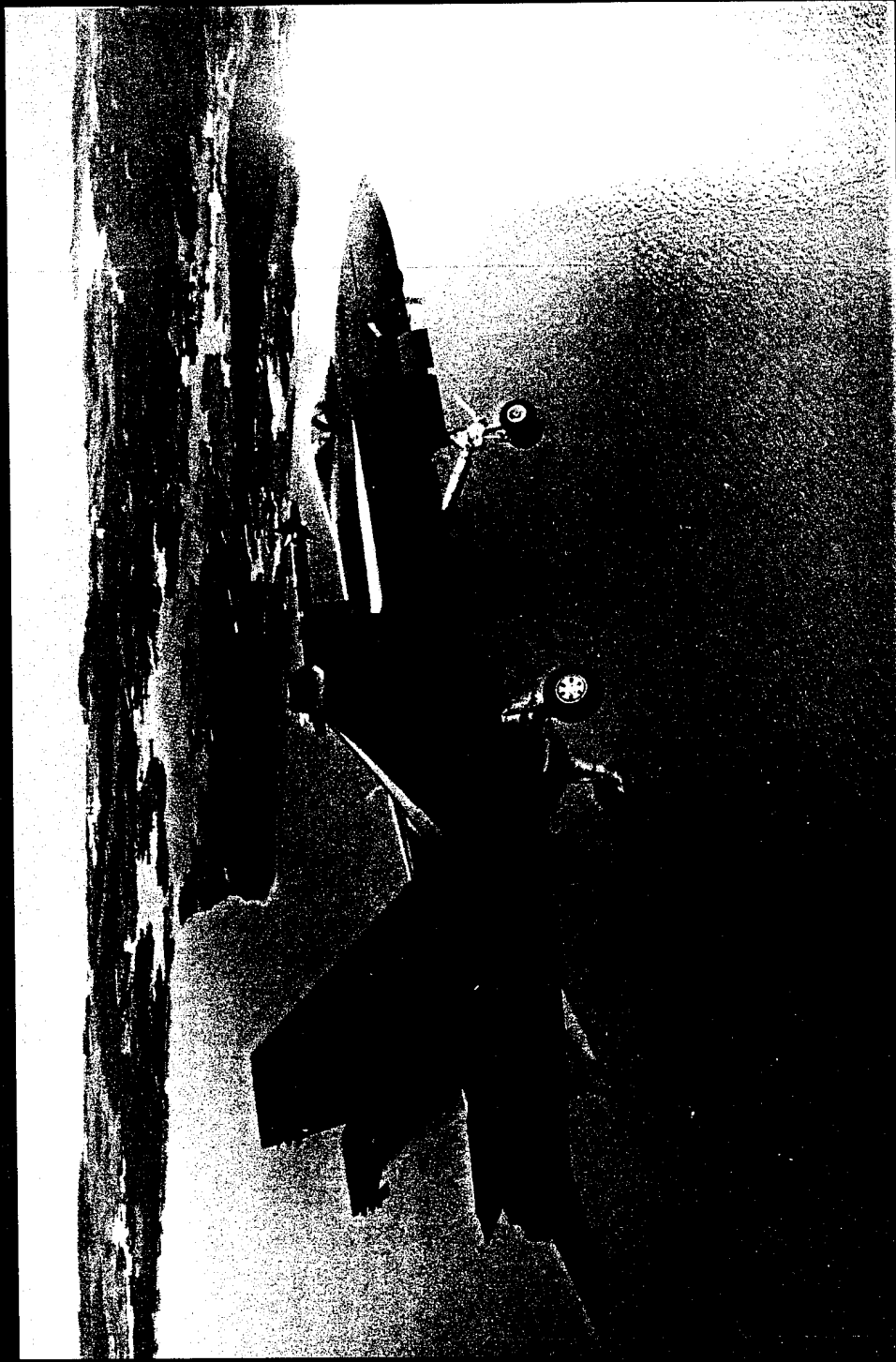


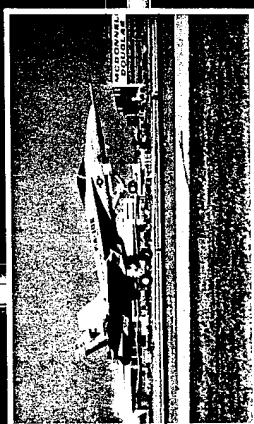


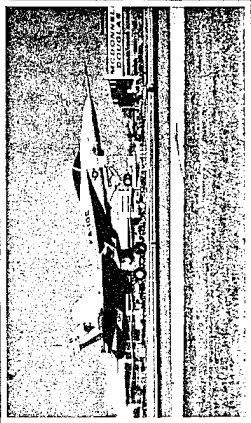
E/F Flight Test Status (3/1/96)

- E-1 6 Flights 8.8 hr
- E-2 6 Flights 9.0 hr
- Both Aircraft @ Pax – Ready to Test
 - E-1 Air Data/Envelope Expansion
 - E-2 FQ/Propulsion/IFR

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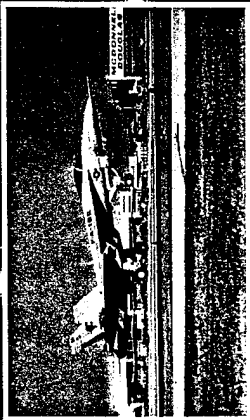




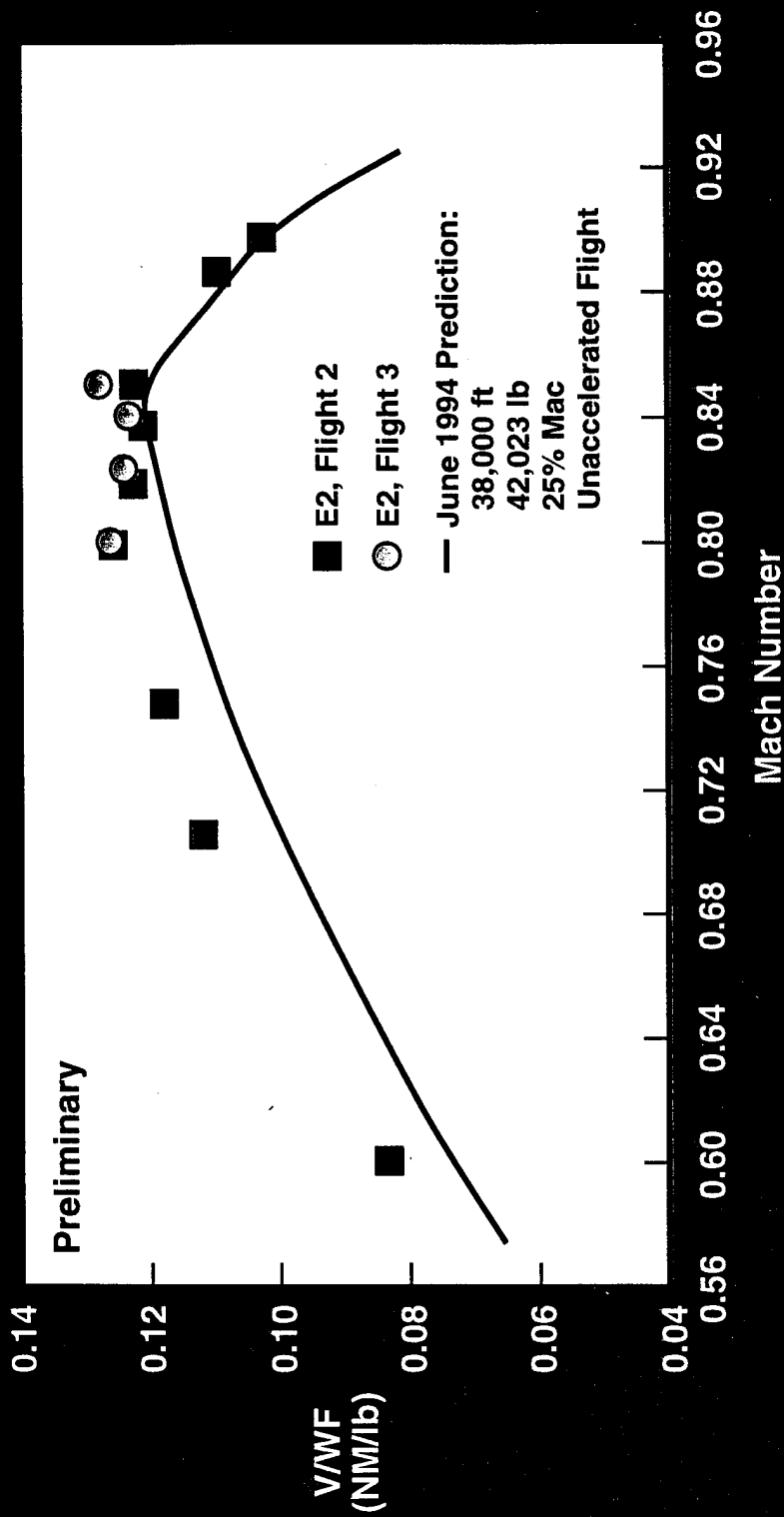


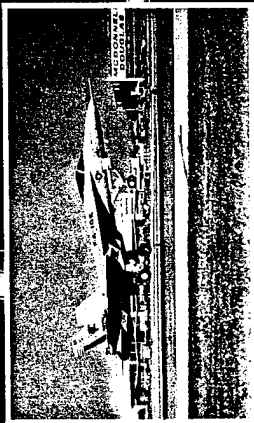
So, How Does It Fly?

- Handling Qualities
 - Up and Away
 - Landing
 - No Major FCS Design Issues
- Engine
 - Precise Control
- Performance
 - "Data On the Line or Above"
Longer Test Missions

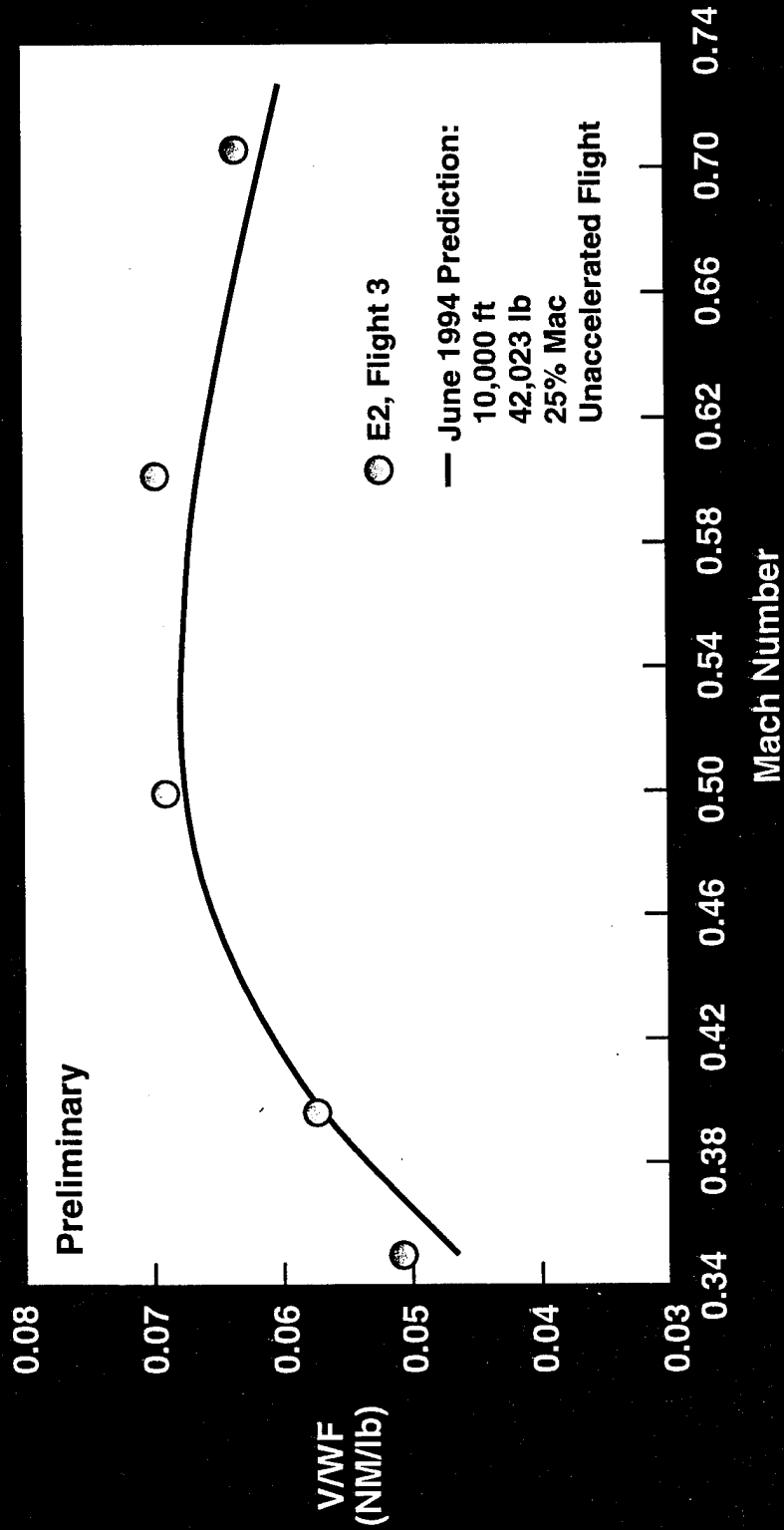


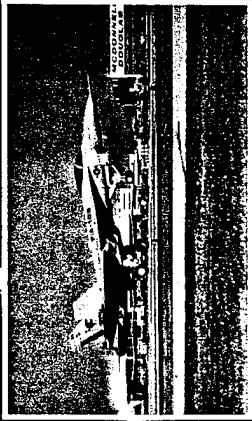
Raw Uncorrected EOA Cruise Specific Range @ W/Delta = 206,238 (2) AIM-9 Configuration





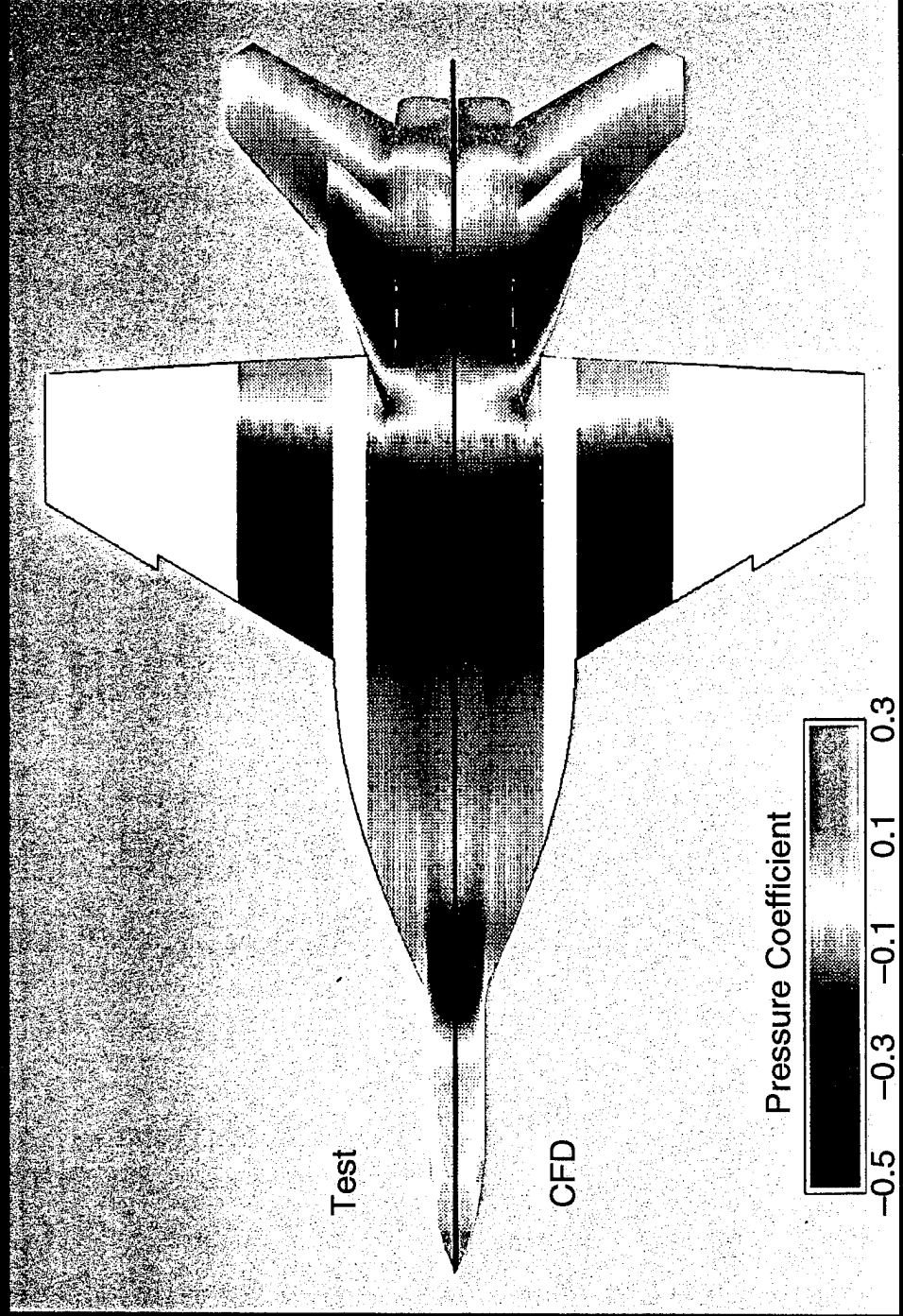
Raw Uncorrected EOA Cruise Specific Range @ W/Delta = 61,107 (2) AIM-9 Configuration





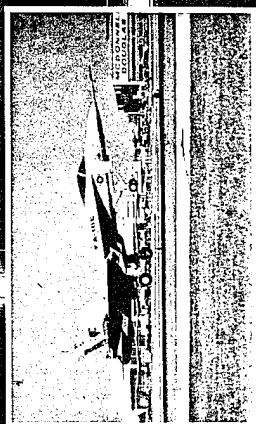
Test Data Validates CFD

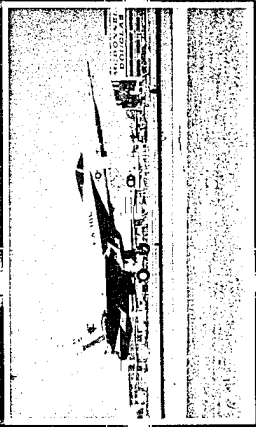
F/A-18E Sting and Distortion/Jet Effects Model
Mach 0.85, $\alpha = 3.5^\circ$





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Comparisons

Landing	42,000 lb GW 133 KIAS App SPD	35,000 lb GW 146 KIAS App SPD
Climb	Mid Power Climb	Afterburner Required
High Altitude Maneuvering	Buffer Free	In Buffer



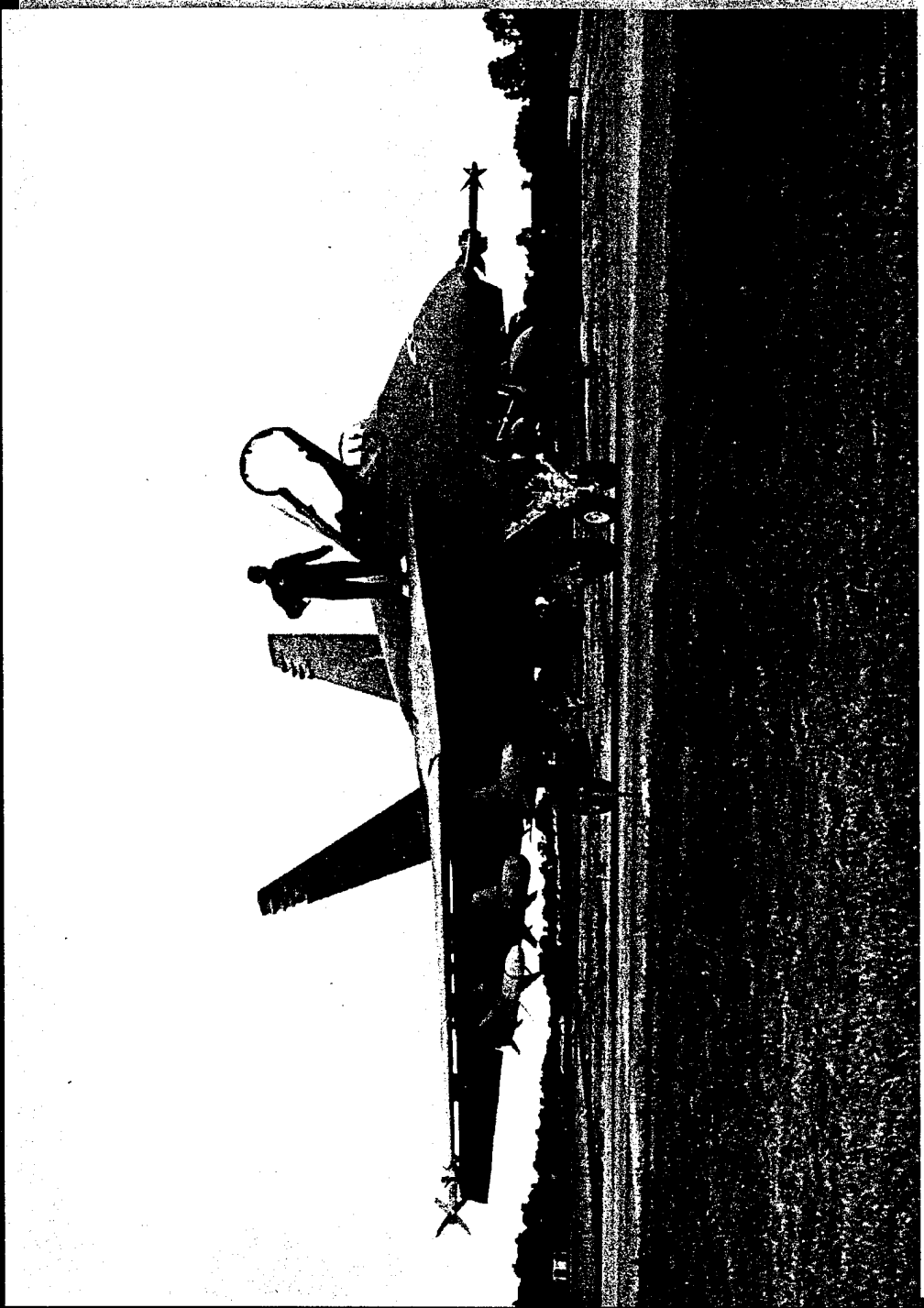
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CPD623002000000



Integrated Test Team

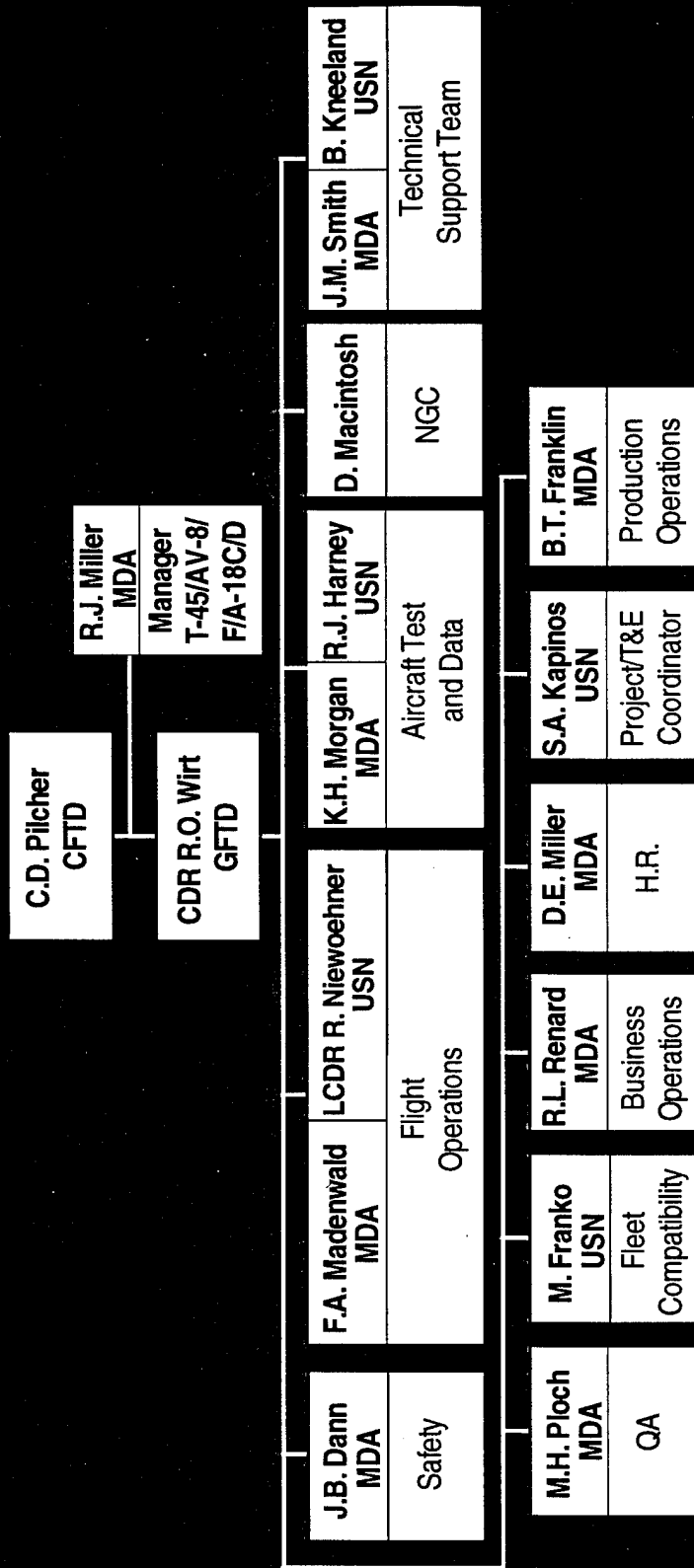


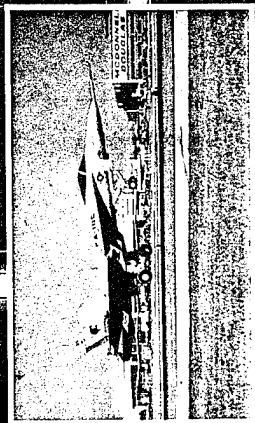
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F/A-18E/F Flight Test

Integrated Test Team Organization





GPB200029 CVS



GP62300037 cys



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